



PTO/SB/08B (10-01) Approved for use through 10/31/2002. OMB 0651-0031

PATENT TRADEMARK OFFICE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

control number.

Substitute for form 1449B/PTO

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

> (use as many sheets as necessary) of

Complete if Known				
 Application Number	09/757.398			
Filing Date	01/05/2001			
First Named Inventor	Eric S. Weiser			
Group Art Unit	1712			
Examiner Name	Patricia Short			
Attorney Docket Number	LAR-16079-1	,		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
PS		Vol. 32、じゅつい). P.M. HERGENROTHER, R.G. BRYANT, B.J. JENSEN, & S.J. HAVENS, "Journal of Polymer Science," Phenylethynyl-Terminated Imide Oligomers and Polymers Therefrom, John Wiley & Sons, Inc., p. 3061-3067,	X_				
PS	-	CHUN-SHAN WANG & HANN-JANG HWANG, "Journal of Polymer Science," Investigation of Bismaleimide Containing Naphthalene Unit II Thermal Behavior and Properties of Polymer, John Wiley & Sons, Inc., p. 1493-1500, Vol. 34, 1996.					
PS		Vol. 28 (1990) ANDREA E. HOYT & BRIAN C. BENICEWICZ, "Journal of Polymer Science," Rigid Rod Molecules as Liquid Crystal Thermosets. II. Rigid Rod Esters, John Wiley & Sons, Inc., p. 3417-3427, X					
PS		No. 28 (1990). ANDREA E. HOYT & BRIAN C. BENICEWICZ, "Journal of Polymer Science," Rigid Rod Molecules as Liquid Crystal Thermosets. I. Rigid Rod Amides, John Wiley & Sons, Inc., p. 3403-3415, X.					
ps		J.P. HABAS, M.F. GRENIER-LOUSTALOT, & J. PEYRELASSE, "High Performance Polymer," Rheological and Spectroscopic characterization of the Properties of a Prepolymer for High-Temperature Applications: the IP960 System, IOP Publishing Ltd., p. 407-426, Vol. 8 (1996).					
PS		ANDREA H. HOYT & SAMUEL J. HUANG, "American Chemical Society," Lyotropic Liquid Crystalline Oligomers for Molecular Composites, The Division of Polymer Chemistry, Inc. p.477-478, Vol. 34, No. 1, 1943					
ps	,	ARTHUR J. GAVRIN, CHRISTINE L. CURTS, & ELLIOT P. DOUGLAS, "Journal of Polymer Science," High-Temperature Stability of a Novel Phenylethynyl Liquid-Crystalline Thermoset, John Wiley & Sons, Inc., p.4184-4190, Vol. 37, (1999).					
PS		WERNER MORMANN & CHRISTIAN KUCKERTZ, "Macromol. Chem. Phys.," Liquid Crystalline Cyanurate Thermosets Through Cyclotrimerisation of Novel Triaromatic Dicyanates, Huthig& Wepf Verlag, Zug, p.845-851, Vol. 199 (1993)					
PS		ELLIOT P. DOUGLAS, DAVID A. LANGLOIS, & BRIAN C. BENICEWICZ, "American Chemical Society," Synthesis, Phase Behavior, and Curing Studies of Bisacetylene Rigid-Rod Thermosets, 9. 1925-1933, (1994).					
ps		HANS R. KRICHELDORF, "Mol. Cryst. Liq. Cryst," Liquid-Crystalline Polyimides, Gordon and Breach Science Publishers, 87-109, vol. 254, Li994).	/E				
		OCT 0 7 2	002				
		7017	DE				
Examine	er	PSY Date 12/3/02					

Considered Signature

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.



PATENT TRADEMARK OFFICE

PTO/SB/08A (10-01)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Complete if Known Substitute for form 1449A/PTO Application Number 09/757,398 INFORMATION DISCLOSURE 01/05/2001 Filing Date Theodorus J. Dingemans STATEMENT BY APPLICANT **First Named Inventor** Art Unit 1712 (use as many sheets as necessary) Patricia Short **Examiner Name** Attorney Docket Number LAR-16079-1 Sheet of

	· · ·	<u> </u>	U.S. PAT	ENT DOCUMENTS	
Examiner Initials*		Document Number Number - Kind Code ² (if known)		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
122		US-3,839,287	10/01/1974	Union Carbide Corporation	
122		US-3,864,309	02/04/1975	Hughes Aircraft Company	
PS		US-3,975,444	08/17/1976	U.S.A. as rep by AirForce	
(3		US-4,225,497	09/30/1980	Rhone-Poulene Indust., Inc.	
PS		US-4,513,131	04/23/1985	Reinhardt	
D2		US-4,550,177	10/29/1985	U.S.A as rep. by NASA	
PS		US-4,661,604	04/28/1987	TRW, Inc. & The Boeing Co.	
PS		US-4,684,714	08/04/1987	The Boeing Company	
PS		US-4,739,030	04/19/1988	The Boeing Company	
(3		US-4,762,906	08/09/1988	BASF Aktiengesellschaft	
PS		US-4,851,495	07/25/1989	The Boeing Company	
65		US-4,851,501	07/25/1989	The Boeing Company	
PS		US-5,068,308	11/26/1991	BASF Aktiengesellschaft	
(25		US-5,092,890	03/03/1992	BASF Aktiengesellschaft	
PS		US-5,198,551	03/30/1993	U.S.A. rep by Dept of Energ	
ps		US- 5,237,004	08/17/1993	Rohm and Haas Company	
<u>(S</u>		US-5,315,011	05/24/1994	U.S.A. rep by Dept of Energ	
PS		US- 5,319,064	06/07/1994	Univ. of Mass at Amherst	
<u>es</u>		US- 5,418,209	05/23/1995	Dai Nippon Printing Co.	
7/5		US- 5,491,201	02/13/1996	The Dow Chemical Company	

	FOR	EIGN PATENT D	OCUMENTS		
Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	DE197 49 123.5	-5/20/1999	BASF AG, Ludwigshafen		L
	WO 99/24529	5/20/99	English Version		
	DE 197 49 123 A 1	- 5/20/1999	BASF AG, Ludwigshafen		L
		5/12/99	German Version		L
		•			
					↓
					igspace
					-
		Cite No.1 Foreign Patent Document Country Code3 -Number -Kind Code5 (#known) DE 197 49 123.5 WO 991245 29	Cite No.1 Foreign Patent Document Publication Date MM-DD-YYYY	Cite No.1 Country Code3 - Number4 - Kind Code5 (#known) Publication Date MM-DD-YYYY Applicant of Cited Document	Cite No.1 Foreign Patent Document Publication Date MM-DD-YYYY Name of Patentee or Applicant of Cited Document Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

		Data	1
Examiner	1 12 ()	Date	12/2/02
Signature	3.01	Considered	10(3(02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

	Substitut	e for form 1449A/F	то		Complete if Known		
	INIEC		N D		Application Number	09/757.398	
	INFC	RIVIATIO	N DE	SCLOSURE	Filing Date	01/05/2001	
STATEMENT BY APPLICANT				APPLICANT	First Named Inventor	Theodorus J. Dingemans	
					Art Unit	1712	
		(use as many s	heets a	s necessary)	Examiner Name	Patricia Short	
	Sheet	1	of	1	Attorney Docket Number	LAR-16079-1	

		U.S. PAT	ENT DOCUMENTS	
Examiner Initials*	Cite No. 1 Number - Kind Code 2 (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
152	US- 5,550,204	08/27/1996	The Boeing Company	
	US- 5,688,895	11/18/1997	E.I. DuPont de Nemours & Co	
125	US- 5,843,541	12/01/1998	OPTATECH Corporation	
62	US- 5,889,077	03/30/1999	Xerox Corporation	
1/2	US-3,778,410	12/11/1973	Eastman Kodak Company	
PS	US- 3,804,805	12/1/1972	Eastman Kodak Company	
52	US-4,067,852	1/10/1978	Celanese Corporation	
12>1	US-4,161,470	7/17/1979	Celanese Corporation	
125	US-4,083,829	4/11/1978	Celanese Corporation	_
25	US-4,351,918	9/28/1982	Celanese Corporation	
(2S)	US-4,267,289	5/12/1981	Celanese Corporation	
125	US-4,581,399	4/8/1986	Celanese Corporation	
PS	US- 4,746,694	5/24/19888	Hoechst Celanese Corporation	
P5	US-4,710,547	12/1/1987	Celanese Corporation	
PS	US- 5,216,073	6/1/1993	Hoechst Celanese Corp.	
PS	US- 4,654,412	3/31/1987	Celanese Corporation	
クシー	US- 5,114,612	5/19/1992	U.S.A. as rep. by Dept. of Energy	
'PS	US- 5,475,133	12/12/1995	The Regents of the Univ. of California	
127	US- 5,575,949	11/19/1996	The Regents of the Univ. of California	
	US-	_		

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code 3 -Number 4 -Kind Code 5 (#known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶				
	<u> </u>									
				•						

Examiner Signature	PSIA	Date Considered	12/3/02

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



•

Approved for use through 10/31/2002. OMB 0651-0031
PATENT TRADEMARK OFFICE
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB yontrol number.

+

OUT 23 2002

Sheet

EDUDSTITUTE for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known				
Application Number	09/757.398			
Filing Date	01/05/2001			
First Named Inventor	Theodorus J. Dingemans			
Group Art Unit	1712			
Examiner Name	Patricia Short			
Attorney Docket Number	LAR-16079-1			

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, joumal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
B		A.J. EAST, L.F.CHARBONNEAU, & G.W. CALUNDANN, "Thermotropic Poly(Ester-Amides) Based on Haphthalene Monomers," Mol. Cryst. Liq. Cryst., Gordon and Breach Science Publishers, p. \$15-637, Vol. 157, 1968.	X			
						
<u></u>						

Examiner	\mathcal{O}_{α} . α	l Date	
Examine	12 5 1	Date	17.13 102
Signature		Considered	(0)3100
CIGILATALO		1 Golloidereal	•

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.